



SMALLPOX FACT SHEET

Information on Live Virus Vaccines and Vaccinia

The vaccinia virus is the "live virus" used in the smallpox vaccine. It is a "pox"-type virus related to smallpox. When given to humans as a vaccine, it helps the body to develop immunity to smallpox. The smallpox vaccine does not contain the smallpox virus and it cannot cause smallpox.

What is a "live virus" vaccine?

- A "live virus" vaccine is a vaccine that contains a "living" virus that is able to give and produce immunity, usually without causing illness.
- Because the virus in the smallpox vaccine is live, it can be transmitted to other parts of the body or to other people and so the site must be cared for carefully.
- For most people with healthy immune systems, live virus vaccines are effective and safe.
- Sometimes a person getting a live vaccine experiences mild symptoms associated with the virus in the vaccine.
- Other live virus vaccines used include measles, mumps, rubella, and chickenpox.

Facts about vaccinia

- The vaccinia virus, the virus in the smallpox vaccine, is another "pox"-type virus.
- Vaccinia is related to smallpox, but milder.
- The vaccinia virus may cause rash, fever, and head and body aches. In certain groups of people, complications from the vaccinia virus can be severe.
- Vaccinia is spread by touching a vaccination site before it has healed or by touching bandages or clothing that have been contaminated with live virus from the smallpox vaccination site.
- This way, vaccinia can spread to other parts of the body or to other individuals. This is called inadvertent inoculation.
- In the past, spreading to other parts of the vaccine recipients' body was the more common form of inadvertent inoculation.
- Careful care must be taken of the site of the vaccine to prevent spreading of the vaccinia virus.

Who should NOT get the smallpox vaccine?

People most likely to have side effects are people who have, or even once had, skin conditions, (especially eczema or atopic dermatitis) and people with weakened immune systems, such as those who have received a transplant, are HIV positive, or are receiving treatment for cancer. Anyone who falls within these categories, or lives with someone who falls into one of these categories, should NOT get the smallpox vaccine unless they are exposed to the disease. Pregnant women should not get the vaccine because of the risk it poses to the fetus. Women who are breastfeeding should not get the vaccine. Anyone who is allergic to the vaccine or any of its components should not get the vaccine. Children younger than 12 months of age should not get the vaccine. Also, the Advisory Committee on Immunization Practices (ACIP) advises against non-emergency use of smallpox vaccine in children younger than 18 years of age.

For more information, visit www.cdc.gov/smallpox, or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)

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